

## WIRELESS CONTROLLER INCLUDING INDICATOR

### CROSS-REFERENCE TO RELATED APPLICATIONS

[0001] This is a Continuation application of U.S. application Ser. No. 14/956,551 filed on Dec. 2, 2015 in the United States Patent and Trademark Office, which claims the benefit of Korean Patent Application Nos. 10-2014-0171972 filed on Dec. 3, 2014 and 10-2015-0135151 filed on Sep. 24, 2015 in the Korean Intellectual Property Office, the disclosures of which are incorporated herein by reference.

### BACKGROUND

[0002] 1. Field

[0003] The present disclosure relates to a wireless controller which remotely controls an external device.

[0004] 2. Description of the Related Art

[0005] Recently, technologies related to the Internet of Things are being developed.

[0006] However, it is difficult to apply Internet of Things technologies to existing home appliances which were released or sold before the Internet of Things technologies were developed. Recently, attempts to apply the Internet of Things technologies to existing home appliances are being made.

### SUMMARY

[0007] Embodiments disclosed herein provide a wireless controller that shows whether or not a voice, motion, or an image comply with a user's command, and controls an external device in accordance with the user's command.

[0008] According to an embodiment, a wireless controller includes a main body provided in a shape of a flowerpot, and including a voice recognition unit, a control unit generating a signal for controlling an object to be controlled, which is designated by a voice recognized in the voice recognition unit, in accordance with the voice, and a communication unit outputting the control signal generated in the control unit to the object to be controlled; and an indicator provided at the main body in a shape of at least one of a stem, a leaf, a flower, and a tree, and showing a motion corresponding to the voice recognized in the voice recognition unit.

[0009] In addition, the main body may further include a speaker outputting as a sound whether the control in accordance with the voice has been performed or a result of the performance.

[0010] In addition, the speaker may output a voice which complies with a command in accordance with the voice recognized in the voice recognition unit.

[0011] In addition, the speaker may output a voice which does not comply with the command in accordance with the voice recognized in the voice recognition unit.

[0012] In addition, the indicator may include a first indicator showing a motion corresponding to the voice recognized in the voice recognition unit, and a second indicator which includes a display device showing a motion corresponding to the voice recognized in the voice recognition unit and displaying an image corresponding to the voice recognized in the voice recognition unit.

[0013] In addition, the indicator may include a first indicator showing a motion corresponding to the voice recognized in the voice recognition unit, and a second indicator

which includes a support unit provided such that the display device showing a motion corresponding to the voice recognized in the voice recognition unit and displaying an image corresponding to the voice recognized in the voice recognition unit is detachable.

[0014] The indicator may include a display device displaying an image corresponding to the voice recognized in the voice recognition unit.

[0015] The indicator may be provided to be input with a command for controlling the object to be controlled through a manipulation in accordance with a predetermined manipulation method.

[0016] In addition, when the command through the indicator is input, the control unit may generate the control signal for controlling the object to be controlled in accordance with the input command.

[0017] In addition, the display device may display as an image or a text whether the control in accordance with the voice has been performed or a result of the performance.

[0018] In addition, the display device may display an image or a text which complies with the command in accordance with the voice recognized in the voice recognition unit.

[0019] In addition, the display device may display an image or a text which does not comply with the command in accordance with the voice recognized in the voice recognition unit.

[0020] In addition, the indicator may show a motion which complies with the command in accordance with the voice recognized in the voice recognition unit.

[0021] In addition, the indicator may show a motion which does not comply with the command in accordance with the voice recognized in the voice recognition unit.

[0022] In addition, the communication unit may perform communication with the object to be controlled using one of wireless fidelity (W-Fi), Bluetooth, ZigBee, radio frequency (RF), and infrared (IR) communication methods.

[0023] In addition, the main body may further include a sensor which detects information around the wireless controller.

[0024] In addition, the sensor may include at least one of a temperature sensor, a humidity sensor, a dust sensor, a gas sensor, and an illuminance sensor.

[0025] In addition, the control unit may generate the control signal for controlling the object to be controlled based on information detected in the sensor.

[0026] In addition, the main body may further include a main body display unit displaying an image corresponding to the voice recognized in the voice recognition unit.

[0027] In addition, the main body display unit may display as an image whether the control in accordance with the voice has been performed or a result of the performance.

[0028] In addition, the main body display unit may display an image which complies with the command in accordance with the voice recognized in the voice recognition unit.

[0029] In addition, the main body display unit may display an image which does not comply with the command in accordance with the voice recognized in the voice recognition unit.

[0030] In addition, the main body may further include an extension terminal provided to connect the main body with an external device.

[0031] According to another embodiment, a method of controlling an external device using a hardware-based con-